

Give me two dates and I'll predict your project

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Agile Australia 2017







June

A calendar page with a dark red header and a cream-colored body. The word "June" is written in white, bold, sans-serif font in the header. The number "22" is written in black, bold, sans-serif font in the center of the body. Two black circular punch holes are visible at the top of the header. The right edge of the page shows multiple layers, suggesting it's part of a flip calendar.

22

As an Agile Australia Attendee
I want to see some cool talks
So that I can learn new ways
of working

5

1/6/17

22/6/17

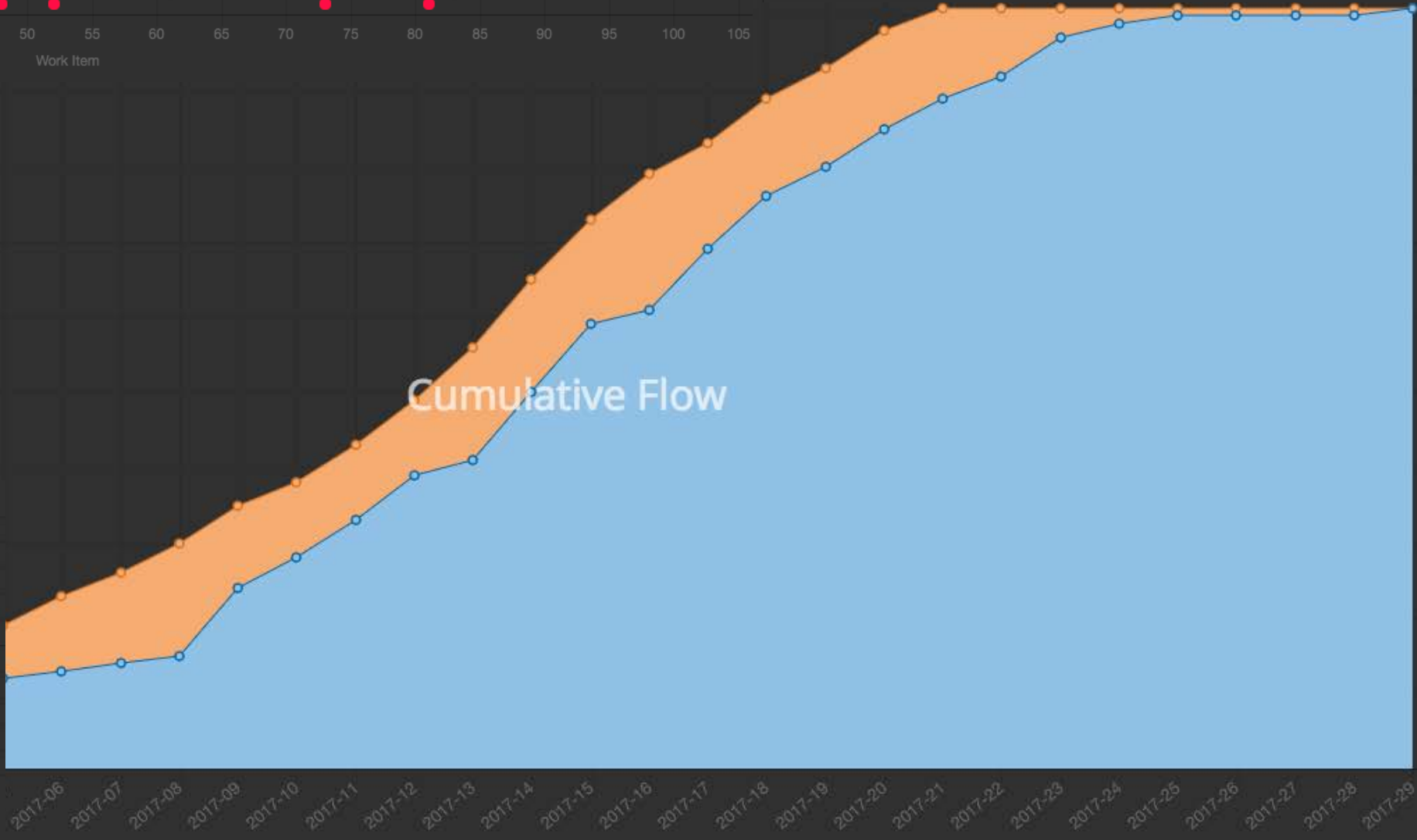
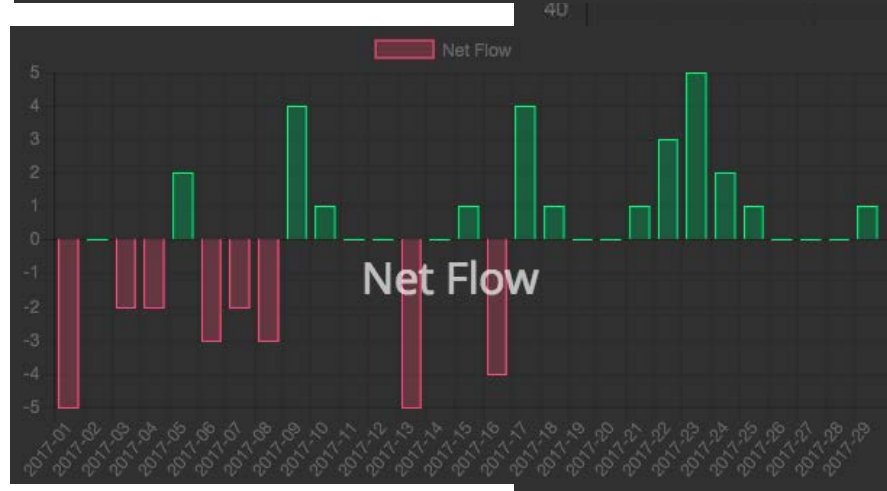
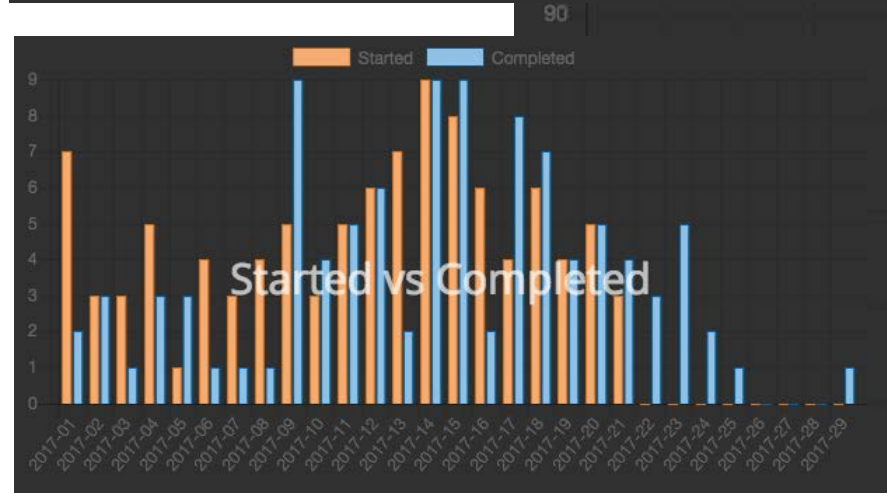
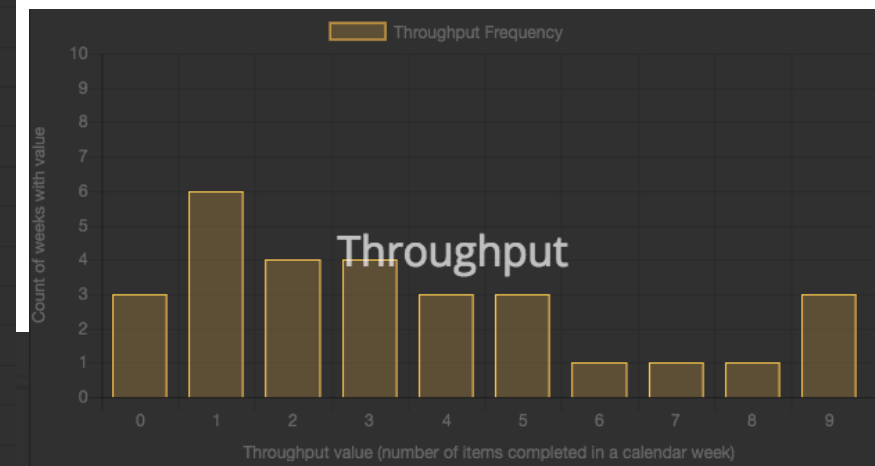
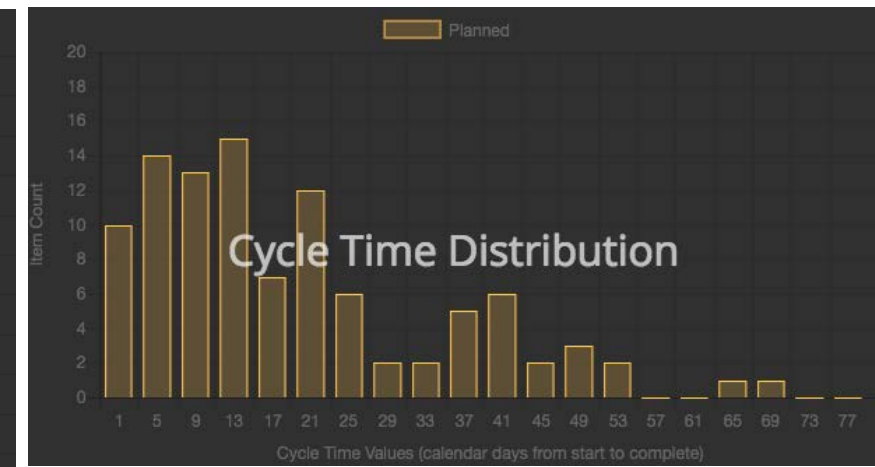
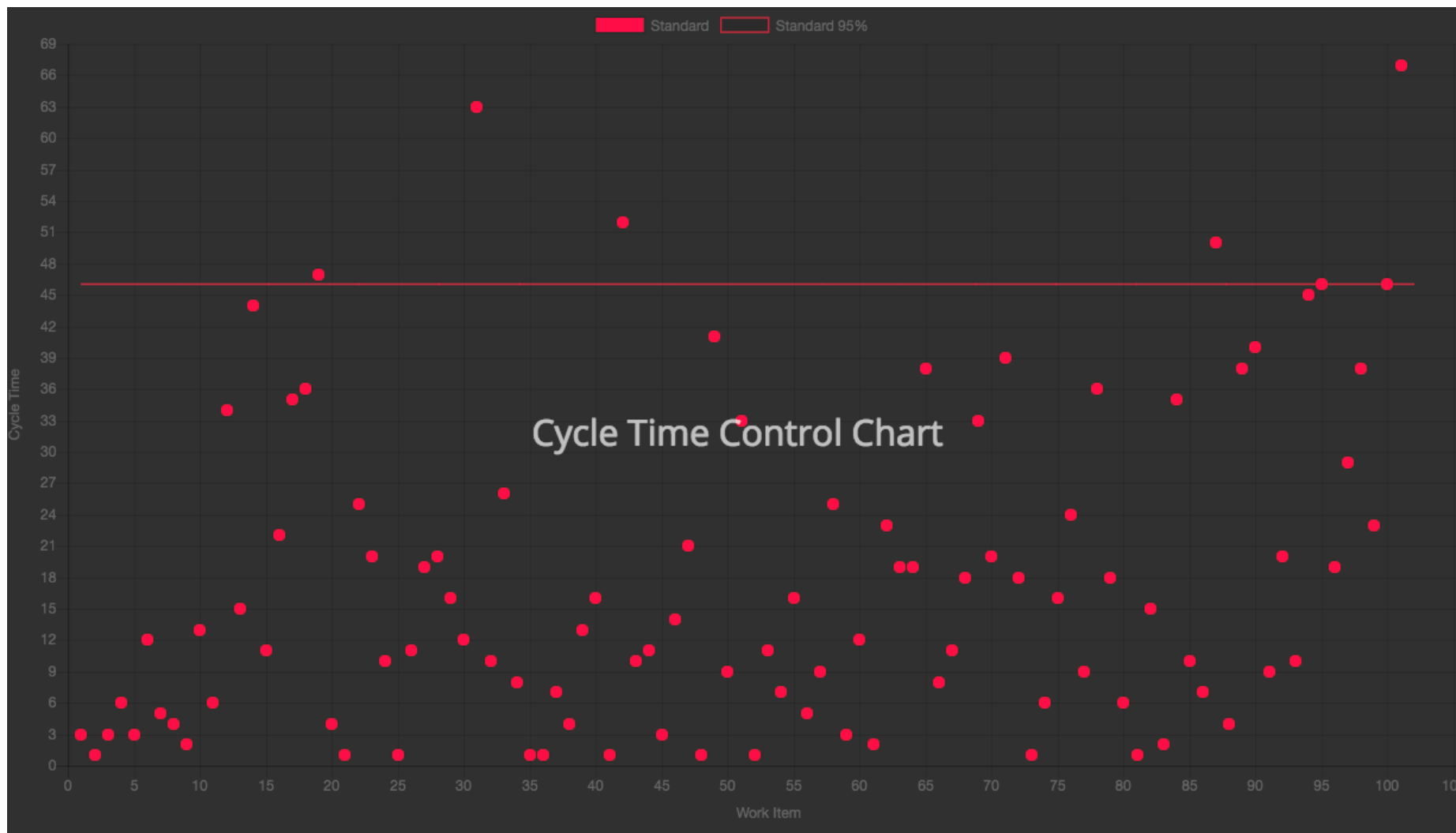
42

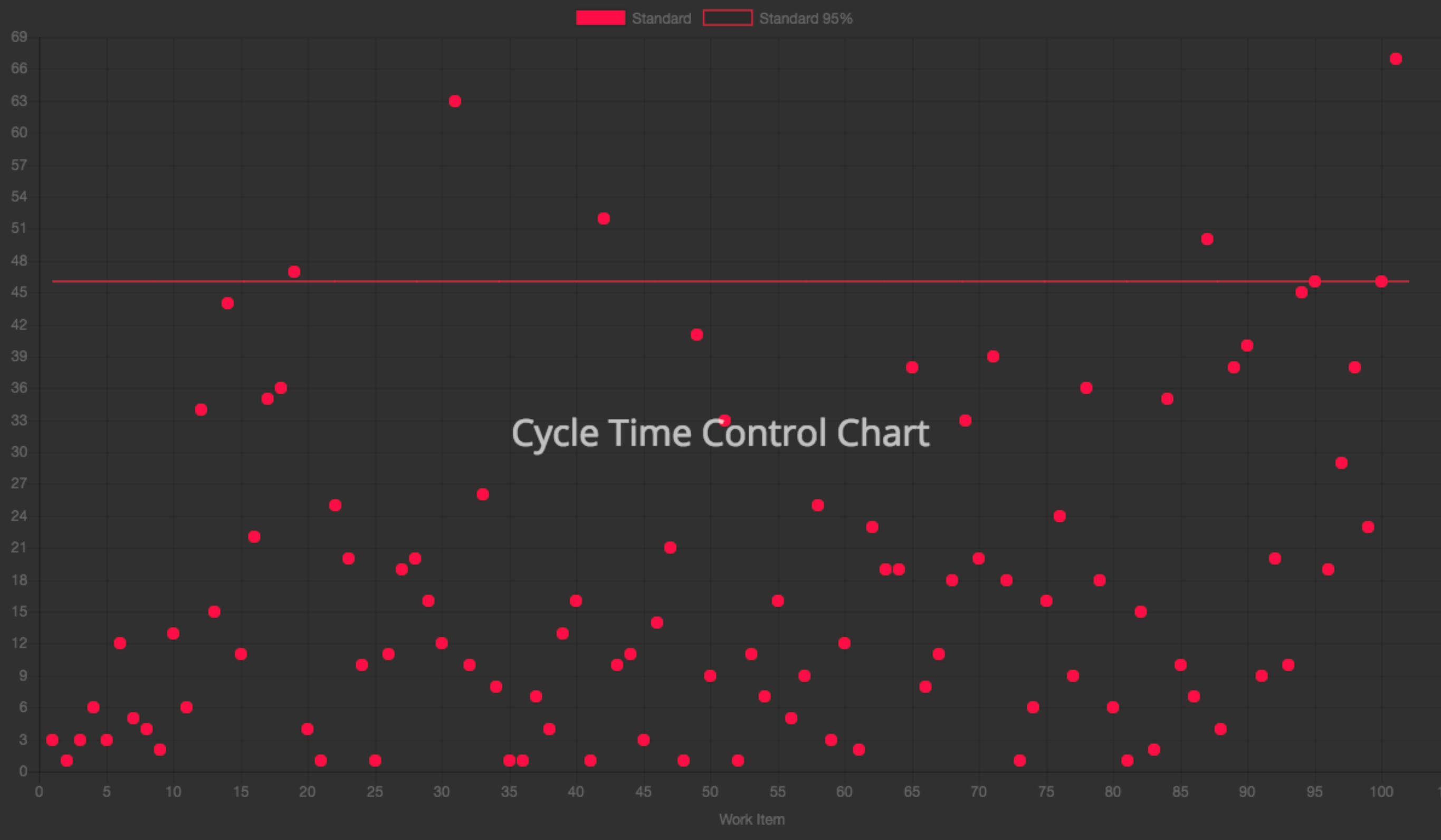
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Capture your stories

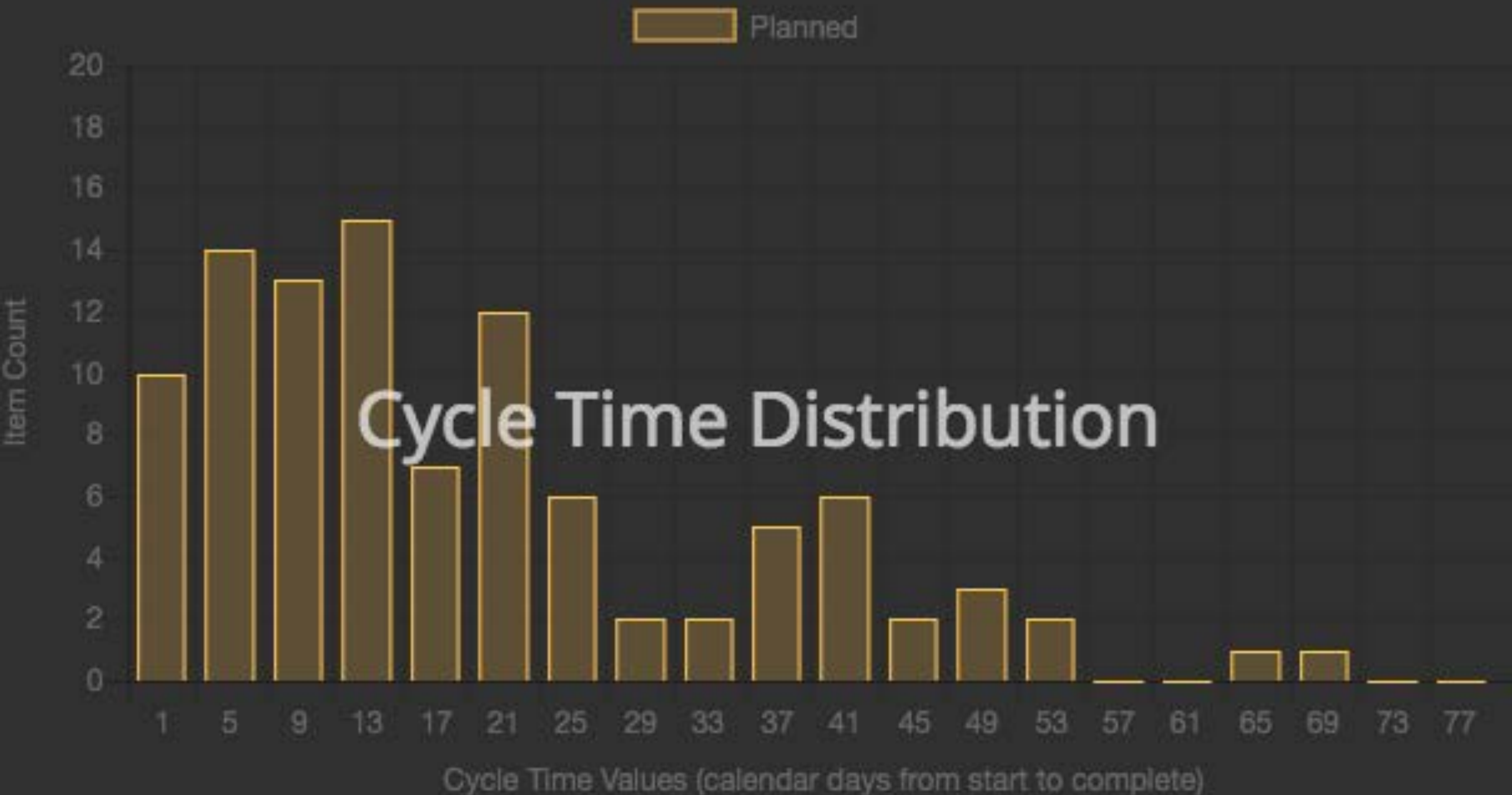
Add Start and Complete Date





Cycle Time

Control chart with 95th Percentile



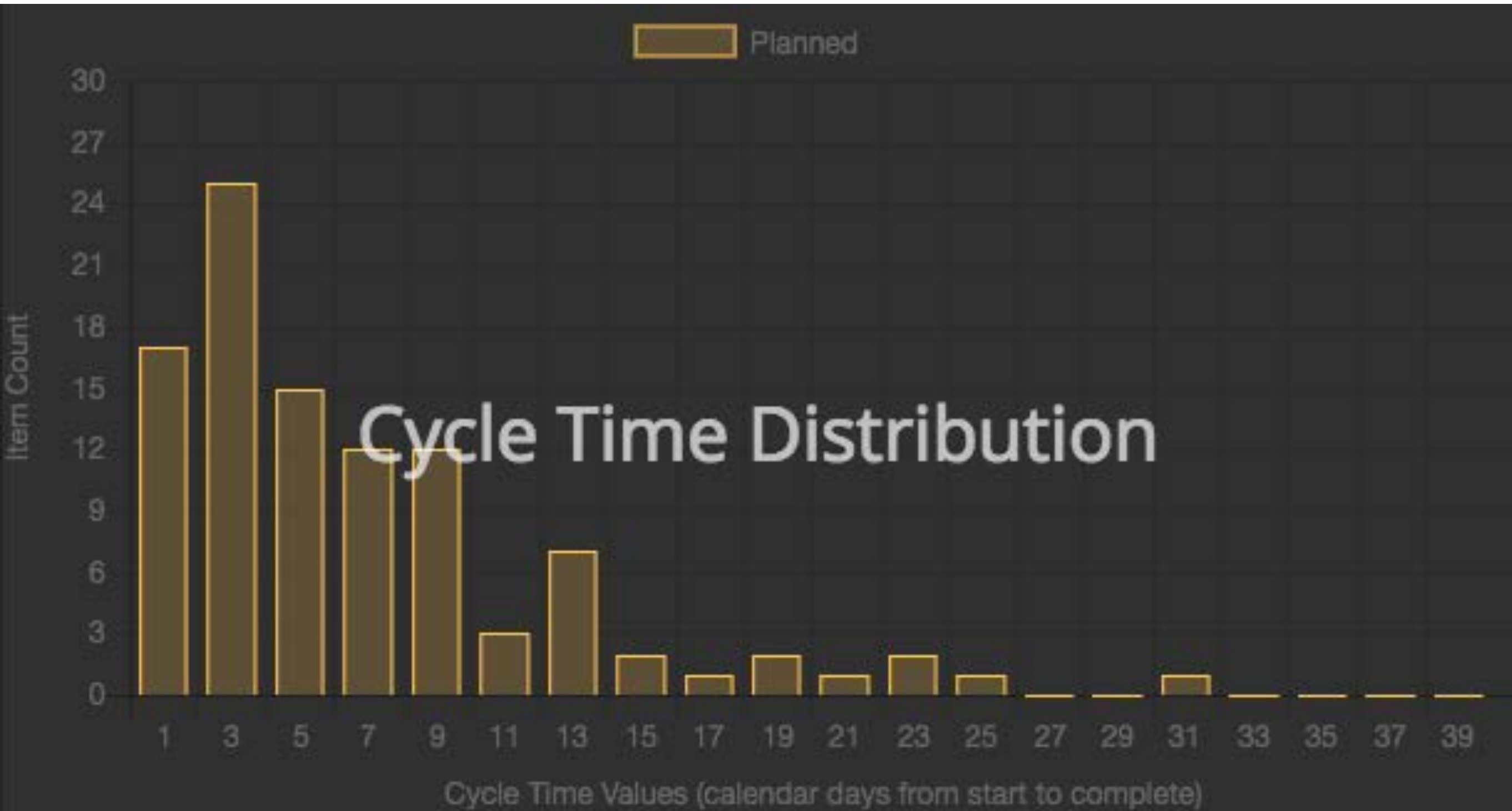
Cycle Time Distribution

Actual cycle time can have variation



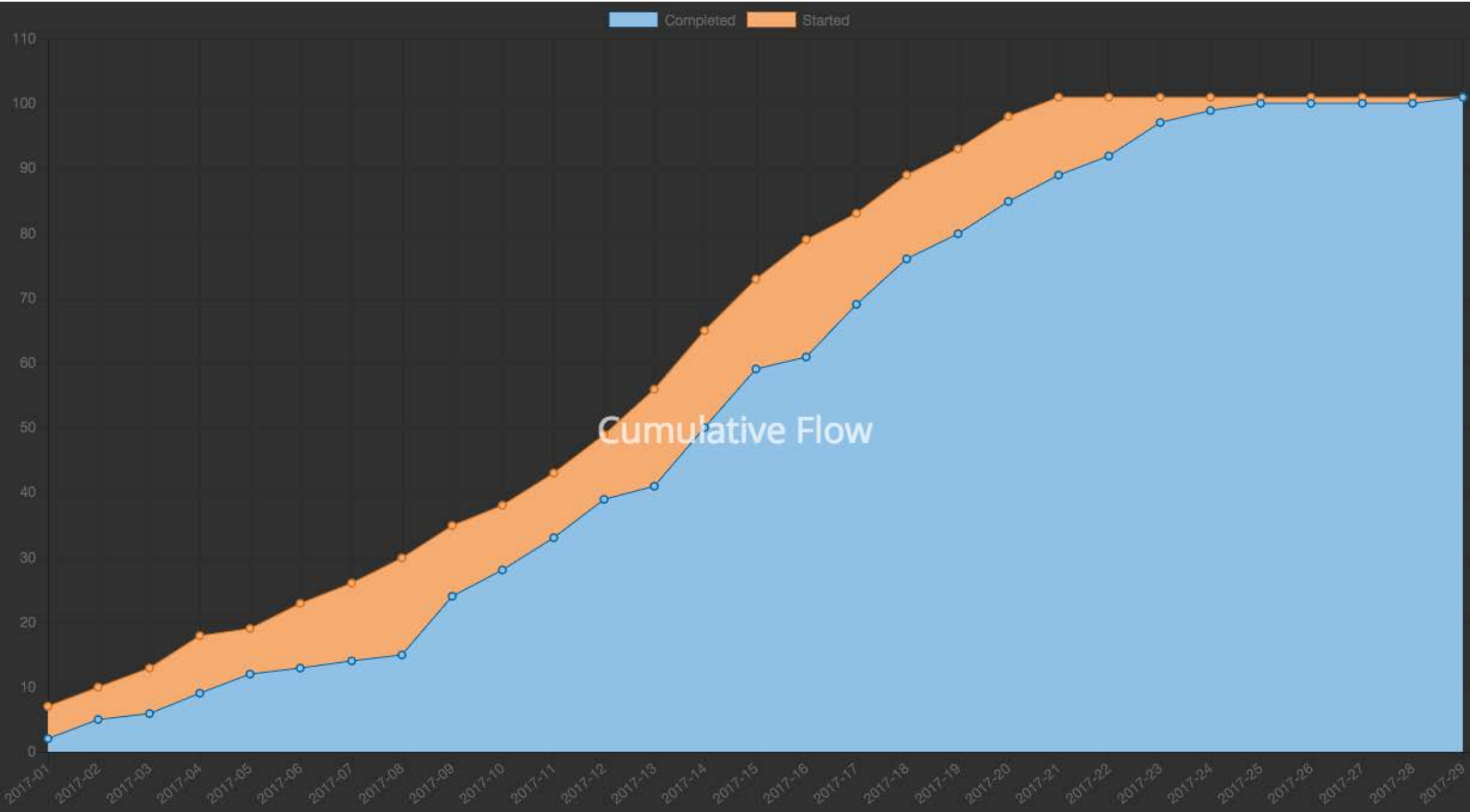
Watch out for these

They often show up when
you least expect it



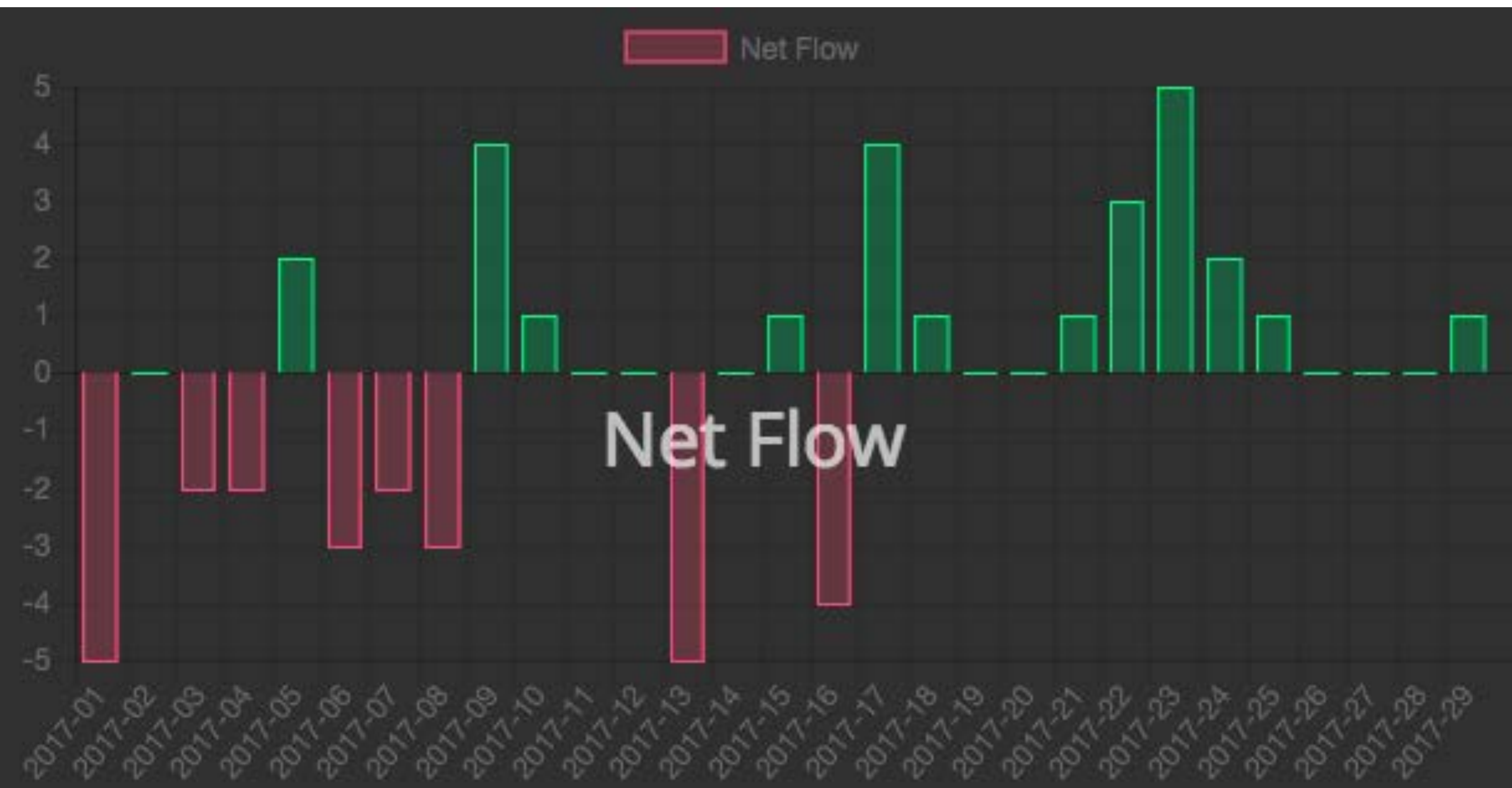
We're working in two
week sprints

Not everything goes
according to the Sprint Plan



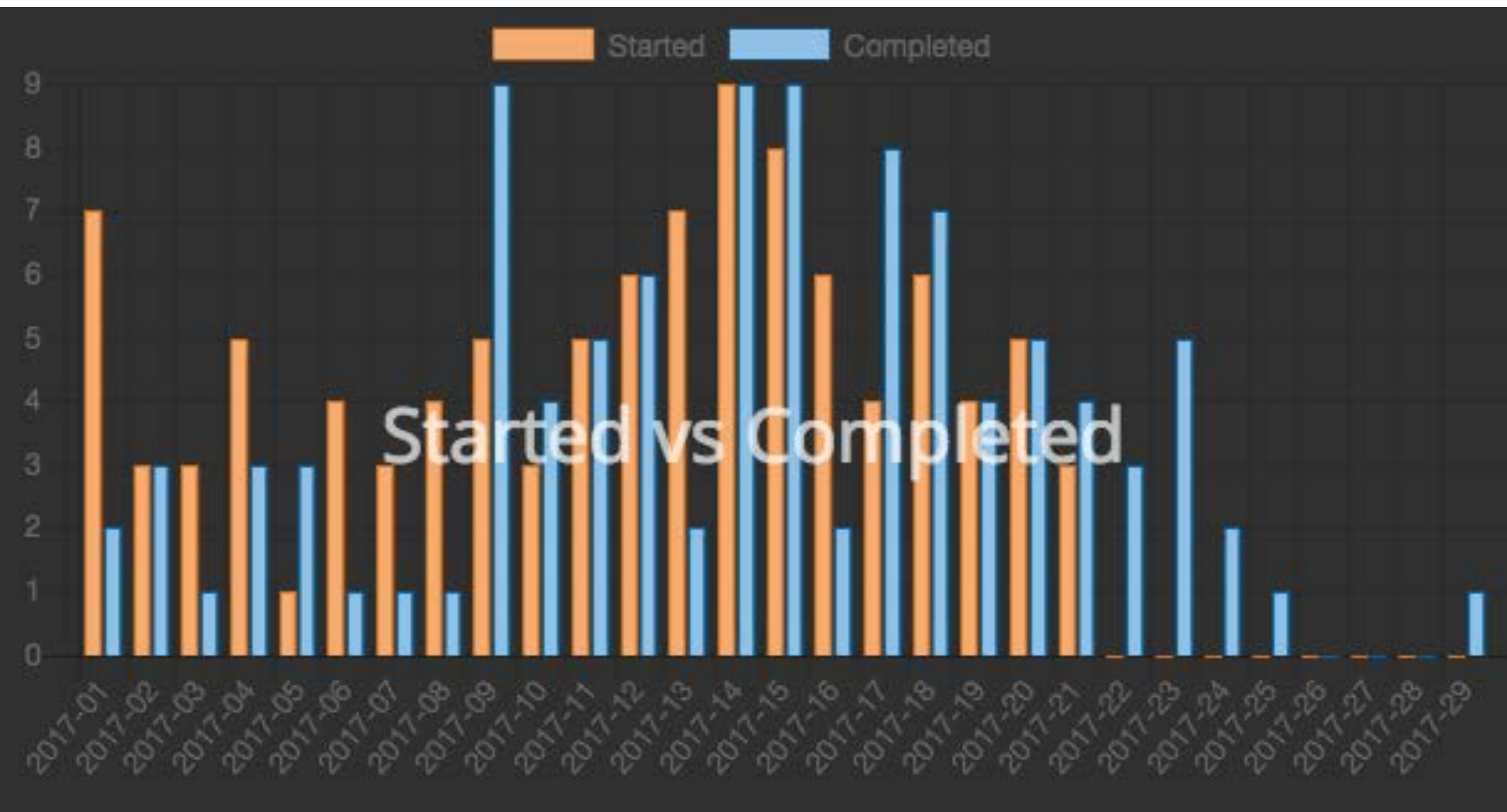
Flow Overview

The Cumulative Flow Diagram



Flow Rates

Is input and output even?



Flow Rates

Volumes are important as well

Count of weeks with value

Throughput Frequency

Throughput

Throughput value (number of items completed in a calendar week)

Throughput

Number of completed items for a given time period (weeks)

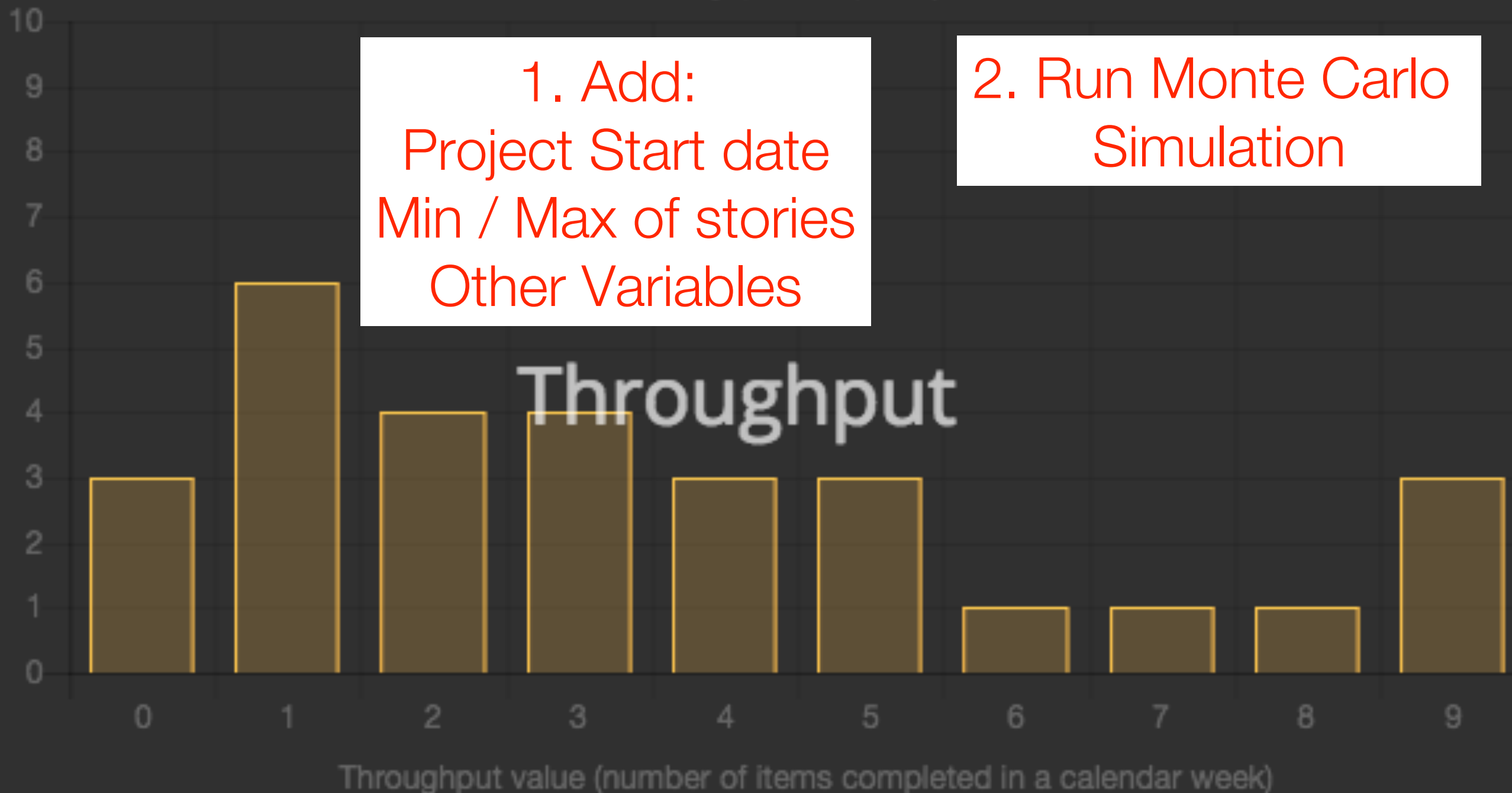
Count of weeks with value

Throughput Frequency

1. Add:
Project Start date
Min / Max of stories
Other Variables

2. Run Monte Carlo
Simulation

Throughput



Throughput

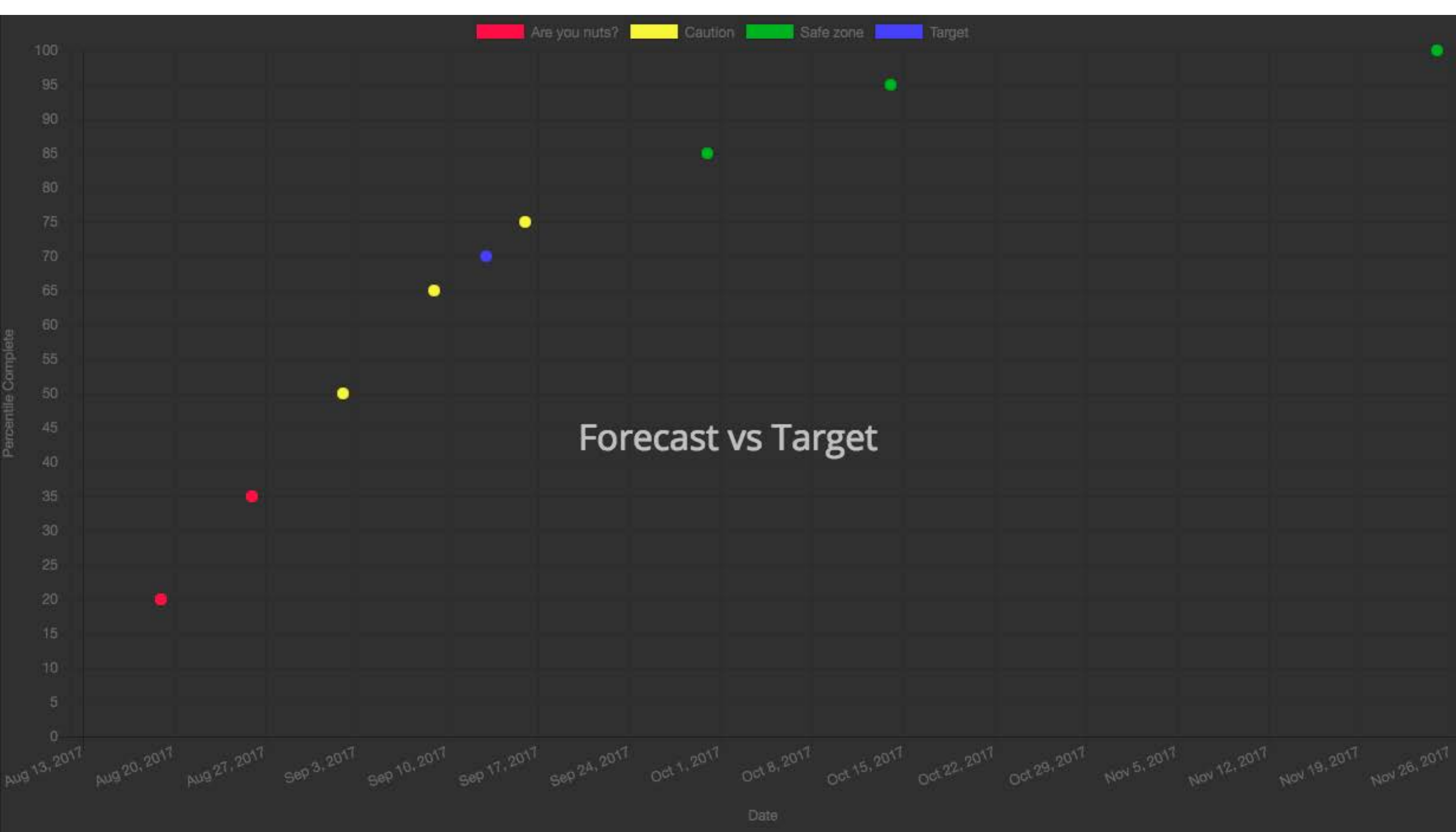
Number of completed items for a
given time period (weeks)

Forecasting

- Uses throughput data
- Run Monte Carlo (with 1000 simulations)
- Add start date for project
- Add number of stories left
 - Max / min
 - Split Rate

```
] :forecast_config:  
  :start_date:      10/6/17  
  :min_number_of_stories: 30  
  :max_number_of_stories: 50  
  :story_split_rate_low: 1.0  
  💡 :story_split_rate_high: 1.0  
  :target_complete_date: 13/9/17
```

Forecasts		
Likelihood	Duration (weeks)	Completion Date
100%	24	25/11/17
95%	18	14/10/17
90%	17	07/10/17
85%	16	30/09/17
80%	15	23/09/17
75%	14	16/09/17
70%	14	16/09/17
65%	13	09/09/17
60%	13	09/09/17
55%	12	02/09/17
50%	12	02/09/17
45%	12	02/09/17
40%	11	26/08/17
35%	11	26/08/17
30%	11	26/08/17
25%	10	19/08/17
20%	10	19/08/17
15%	9	12/08/17
10%	8	05/08/17
5%	8	05/08/17
0%	4	08/07/17



Are we going to deliver
on time?

Is target date in the safe zone?

Take aways

- Capture start and complete dates
- Continually sample and evaluate progress
- Make informed decisions

1/6/17 22/6/17 42

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Forecasts		
Likelihood	Duration (weeks)	Completion Date
100%	27	16/12/17
95%	19	21/10/17
90%	17	07/10/17
85%	16	30/09/17
80%	15	23/09/17
75%	15	23/09/17
70%	14	16/09/17
65%	14	16/09/17
60%	13	09/09/17
55%	13	09/09/17
50%	12	02/09/17
45%	12	02/09/17
40%	12	02/09/17
35%	11	26/08/17
30%	11	26/08/17
25%	10	19/08/17
20%	10	19/08/17
15%	9	12/08/17
10%	8	05/08/17
5%	8	05/08/17
0%	4	08/07/17

References

- Dashboard -
https://github.com/dploeg/kanban_dashboard
- Spreadsheets (Focused Objective) -
<https://github.com/FocusedObjective/FocusedObjective.Resources>